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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,526	09/15/2006	Hiromitsu Takeda	128866	8910
25944 7590 07/26/2010 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER OLSON, ERIC				
ART UNIT		PAPER NUMBER		
1623				
NOTIFICATION DATE		DELIVERY MODE		
07/26/2010		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

OfficeAction25944@oliff.com  
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### Office Action Summary

**Application No.**

10/587,526

**Applicant(s)**

TAKEDA ET AL.

**Examiner**

ERIC S. OLSON

**Art Unit**

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 1-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/CD)  
Paper No(s)/Mail Date 10/20/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **Detailed Action**

This office action is a response to applicant's communication submitted April 29, 2010 wherein a response is made to the requirement for restriction issued March 29, 2010. This application is a national stage application of PCT/JP05/00995, filed January 26, 2005, which claims priority to foreign application JP2004-024894, filed January 30, 2004.

Claims 1-14 are pending in this application.

### ***Election/Restrictions***

Applicant's provisional election with traverse of group II, drawn to a cosmetic composition, filed April 29, 2010, is acknowledged. Applicant's arguments of record with respect to the aforementioned traversal are acknowledged and found to be not persuasive to remove the requirement for restriction. Specifically, Applicant argues that the requirement for restriction does not establish that each and every element of the subject matter that is common to claims 1 and 9 is known in the prior art. However, Applicant's response does not actually address the cited prior art application JP2003-327603 or point out what the alleged shared special technical feature is. The only shared element between the two claim 1 and 9 is the modified polysaccharide of claim 1. Since that polysaccharide is known in the art as discussed further below, the requirement for restriction is thus deemed proper. Furthermore, Applicant argues that there is not a serious burden in searching the two groups together because the subject matter of one group would encompass the subject matter of the other group. While the

composition of claim 9 encompasses the compounds of claim 1, dependent claims 2-8 which depend from claim 1, and dependent claims 10-14 which depend from claim 9 both introduce additional limitations not found in the other group, which would have to be searched individually in the prior art, adding to the search burden to examine all the claims together. For these reasons the requirement for restriction is deemed proper and made **FINAL**.

Claims 1-8 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made with traverse in the reply filed on April 29, 2009.

Claims 9-14 are examined on the merits herein.

### ***Claim Objections***

Claim 9 is objected to because of the following informalities: The claim depends from withdrawn claim 1. Appropriate correction is required, for example rewriting claim 9 as an independent claim incorporating all the limitations of base claim 1.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 12 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

A broad range or limitation together with a narrow range or limitation that falls within the broad range or limitation (in the same claim) is considered indefinite, since the resulting claim does not clearly set forth the metes and bounds of the patent protection desired. See MPEP § 2173.05(c). Note the explanation given by the Board of Patent Appeals and Interferences in *Ex parte Wu*, 10 USPQ2d 2031, 2033 (Bd. Pat. App. & Inter. 1989), as to where broad language is followed by "such as" and then narrow language. The Board stated that this can render a claim indefinite by raising a question or doubt as to whether the feature introduced by such language is (a) merely exemplary of the remainder of the claim, and therefore not required, or (b) a required feature of the claims. Note also, for example, the decisions of *Ex parte Steigewald*, 131 USPQ 74 (Bd. App. 1961); *Ex parte Hall*, 83 USPQ 38 (Bd. App. 1948); and *Ex parte Hasche*, 86 USPQ 481 (Bd. App. 1949). In the present instance, claim 12 recites the broad recitation "a neutralizing agent," and the claim also recites "such as an organic acid and/or an inorganic acid" which is the narrower statement of the range/limitation.

Claims 9-14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These claims incorporate the polymer structure recited in withdrawn claim 1. This structure comprises a side chain containing the group

-(R<sub>4</sub>O)-. In standard chemical terminology, such a parenthetical group would stand for a repeating group and should be accompanied by an integer or variable indicating how many times it repeats. The claim later defines a group (R<sub>4</sub>O)<sub>n</sub> wherein n is 0-30. As no variable n or (R<sub>4</sub>O)<sub>n</sub> appears elsewhere in the side chain formula, it is unclear how many times the groups (R<sub>4</sub>O) should repeat and how the integer n affects the structure. If n stands for the number of repetitions of (R<sub>4</sub>O) it should be inserted next to the closing parenthesis to indicate this fact. If R<sub>4</sub>O is a variable or optional group depending on a variable other than n, this variable should be inserted into the claims. If R<sub>4</sub>O is not a variable or optional group but merely appears once, the parentheses should be deleted. As the current notation is unclear and ambiguous, and does not allow one skilled in the art to determine the exact limitations of side chains included in the polymers used in the claimed cosmetic products, the claims are indefinite.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 9-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeda et al. (Foreign patent application JP2003-327603, reference and translation submitted with PTO-1449)

Takeda et al. discloses a cosmetic composition for hair comprising a galactomannan polymer having a 3:1 galactose:mannose ratio into which a cationic side chain has been introduced. (column 3 paragraph 0006) The galactomannan polymer is obtained from the Tara (*Caesalpinia Spinosa*) which is the same polysaccharide recited in the limitations of instant claim 1. ( column 3 paragraph 0007) The cationic side chain used in these polymers is a quaternary ammonium side chain that is the same as the structure recited in instant claim 1 and incorporated in claim 9, wherein n is 0. (column 4 paragraphs 0011-0012) The polymer has a charge density of 0.1-3 meq/g. (column 4 paragraph 0013) The cationic polymer is preferably present at between 0.1-5% of the weight of the composition. (column 5 paragraph 0014) Additional agents that can be added to the composition include a long chain (8-24 carbon) carboxylate, which is a fatty acid according to claim 12. (columns 5-6 paragraph 0017) According to claim 6 of Takeda et al., the composition can also comprise a cationic polymer at 0.5-5 wt%. The composition can also comprise a silicone, a higher alcohol, a higher fatty acid, and a sequestering agent including edtate. (column 8 paragraph 0025) Therefore Takeda et al. anticipates the claimed invention.

### **Conclusion**

No claims are allowed in this application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIC S. OLSON whose telephone number is (571)272-9051. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on (571)272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Eric S Olson/  
Examiner, Art Unit 1623  
7/16/2010